

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/331,375

DATE: 07/30/2001
TIME: 10:53:45

Input Set : A:\sequencelisting.txt
Output Set: N:\CRF3\07302001\I331375.raw

ENTERED

4 <110> APPLICANT: Cohen, C.
5 Sampath, K.
7 <120> TITLE OF INVENTION: TREATMENT OF MAMMALIAN MYOCARDIUM WITH MORPHOGEN LOCALLY,
8 OR WITH MORPHOGENICALLY-RELATED MYOGENIC PRECURSOR CELLS
10 <130> FILE REFERENCE: C10T-P01-519
12 <140> CURRENT APPLICATION NUMBER: 09/331,375
13 <141> CURRENT FILING DATE: 1999-12-03
15 <150> PRIOR APPLICATION NUMBER: PCT/US/97/23611
16 <151> PRIOR FILING DATE: 1997-12-19
18 <160> PRIOR APPLICATION NUMBER: 60/033,145
19 <161> PRIOR FILING DATE: 1996-12-20
21 <160> NUMBER OF SEQ ID NOS: 31
23 <170> SOFTWARE: PatentIn Ver. 2.1
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 97
27 <212> TYPE: PFT
28 <213> ORGANISM: Artificial Sequence
30 <220> FEATURE:
31 <223> OTHER INFORMATION: Description of Artificial Sequence: Generic
32 sequence 7
34 <220> FEATURE:
35 <221> NAME/KEY: SITE
36 <222> LOCATION: (2)
37 <223> OTHER INFORMATION: Xaa=Tyr or Lys
39 <220> FEATURE:
40 <221> NAME/KEY: SITE
41 <222> LOCATION: (3)
42 <223> OTHER INFORMATION: Xaa=Val or Ile
44 <220> FEATURE:
45 <221> NAME/KEY: SITE
46 <222> LOCATION: (4)
47 <223> OTHER INFORMATION: Xaa=Ser, Asp or Glu
49 <220> FEATURE:
50 <221> NAME/KEY: SITE
51 <222> LOCATION: (6)
52 <223> OTHER INFORMATION: Xaa=Arg, Gln, Ser, Lys, or Ala
54 <220> FEATURE:
55 <221> NAME/KEY: SITE
56 <222> LOCATION: (7)
57 <223> OTHER INFORMATION: Xaa=Asp or Glu
59 <220> FEATURE:
60 <221> NAME/KEY: SITE
61 <222> LOCATION: (8)
62 <223> OTHER INFORMATION: Xaa=Leu, Val or Ile
64 <220> FEATURE:
65 <221> NAME/KEY: SITE
66 <222> LOCATION: (11)

RAW SEQUENCE LISTING

DATE: 07/30/2001

PATENT APPLICATION: US/09/331,375

TIME: 10:53:45

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF3\07302001\I331375.raw

67 <223> OTHER INFORMATION: Xaa=Gln, Leu, Asp, His, Asn, or Ser
69 <220> FEATURE:
70 <221> NAME/KEY: SITE
71 <222> LOCATION: (12)
72 <223> OTHER INFORMATION: Xaa=Asp, Arg, Asn, or Glu
74 <220> FEATURE:
75 <221> NAME/KEY: SITE
76 <222> LOCATION: (13)
77 <223> OTHER INFORMATION: Xaa=Trp or Ser
79 <220> FEATURE:
80 <221> NAME/KEY: SITE
81 <222> LOCATION: (14)
82 <223> OTHER INFORMATION: Xaa=Ile or Val
84 <220> FEATURE:
85 <221> NAME/KEY: SITE
86 <222> LOCATION: (15)
87 <223> OTHER INFORMATION: Xaa=Ile or Val
89 <220> FEATURE:
90 <221> NAME/KEY: SITE
91 <222> LOCATION: (16)
92 <223> OTHER INFORMATION: Xaa=Ala or Ser
94 <220> FEATURE:
95 <221> NAME/KEY: SITE
96 <222> LOCATION: (18)
97 <223> OTHER INFORMATION: Xaa=Glu, Gln, Leu, Lys, Pro, or Arg
99 <220> FEATURE:
100 <221> NAME/KEY: SITE
101 <222> LOCATION: (19)
102 <223> OTHER INFORMATION: Xaa=Gly or Ser
104 <220> FEATURE:
105 <221> NAME/KEY: SITE
106 <222> LOCATION: (20)
107 <223> OTHER INFORMATION: Xaa=Tyr or Phe
109 <220> FEATURE:
110 <221> NAME/KEY: SITE
111 <222> LOCATION: (21)
112 <223> OTHER INFORMATION: Xaa=Ala, Ser, Asp, Met, His, Gln, Leu, or Gly
114 <220> FEATURE:
115 <221> NAME/KEY: SITE
116 <222> LOCATION: (23)
117 <223> OTHER INFORMATION: Xaa=Tyr, Asn or Phe
119 <220> FEATURE:
120 <221> NAME/KEY: SITE
121 <222> LOCATION: (26)
122 <223> OTHER INFORMATION: Xaa=Glu, His, Tyr, Asp, Gln, Ala, or Ser
124 <220> FEATURE:
125 <221> NAME/KEY: SITE
126 <222> LOCATION: (28)
127 <223> OTHER INFORMATION: Xaa=Glu, Lys, Asp, Gln, or Ala

RAW SEQUENCE LISTING

PATENT APPLICATION: US/00/331,375

DATE: 07/30/2001
TIME: 10:45

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF3\07302001\I331375.raw

129 <220> FEATURE:
130 <221> NAME/KEY: SITE
131 <222> LOCATION: (30)
132 <223> OTHER INFORMATION: Xaa=Asp, Ser, Pro, Gln, Ile, or Asn
134 <220> FEATURE:
135 <221> NAME/KEY: SITE
136 <222> LOCATION: (31)
137 <223> OTHER INFORMATION: Xaa=Phe, Leu or Tyr
139 <220> FEATURE:
140 <221> NAME/KEY: SITE
141 <222> LOCATION: (33)
142 <223> OTHER INFORMATION: Xaa=Leu, Val or Met
144 <220> FEATURE:
145 <221> NAME/KEY: SITE
146 <222> LOCATION: (34)
147 <223> OTHER INFORMATION: Xaa=Asn, Asp, Ala, Thr, or Pro
149 <220> FEATURE:
150 <221> NAME/KEY: SITE
151 <222> LOCATION: (35)
152 <223> OTHER INFORMATION: Xaa=Ser, Asp, Glu, Leu, Ala, or Lys
154 <220> FEATURE:
155 <221> NAME/KEY: SITE
156 <222> LOCATION: (36)
157 <223> OTHER INFORMATION: Xaa=Tyr, Cys, His, Ser, or Ile
159 <220> FEATURE:
160 <221> NAME/KEY: SITE
161 <222> LOCATION: (37)
162 <223> OTHER INFORMATION: Xaa=Met, Phe, Gly, or Leu
164 <220> FEATURE:
165 <221> NAME/KEY: SITE
166 <222> LOCATION: (38)
167 <223> OTHER INFORMATION: Xaa=Asn, Ser or Lys
169 <220> FEATURE:
170 <221> NAME/KEY: SITE
171 <222> LOCATION: (39)
172 <223> OTHER INFORMATION: Xaa=Ala, Ser, Gly, or Pro
174 <220> FEATURE:
175 <221> NAME/KEY: SITE
176 <222> LOCATION: (40)
177 <223> OTHER INFORMATION: Xaa=Thr, Leu or Ser
179 <220> FEATURE:
180 <221> NAME/KEY: SITE
181 <222> LOCATION: (44)
182 <223> OTHER INFORMATION: Xaa=Ile, Val or Thr
184 <220> FEATURE:
185 <221> NAME/KEY: SITE
186 <222> LOCATION: (45)
187 <223> OTHER INFORMATION: Xaa=Val, Leu, Met, or Ile
189 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 07/30/2001

PATENT APPLICATION: US/09/331,375

TIME: 10:53:45

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF3\07302001\I331375.raw

190 <221> NAME/KEY: SITE
191 <222> LOCATION: (46)
192 <223> OTHER INFORMATION: Xaa=Gln or Arg
194 <220> FEATURE:
195 <221> NAME/KEY: SITE
196 <222> LOCATION: (47)
197 <223> OTHER INFORMATION: Xaa=Thr, Ala or Ser
199 <220> FEATURE:
200 <221> NAME/KEY: SITE
201 <222> LOCATION: (48)
202 <223> OTHER INFORMATION: Xaa=Leu or Ile
204 <220> FEATURE:
205 <221> NAME/KEY: SITE
206 <222> LOCATION: (49)
207 <223> OTHER INFORMATION: Xaa=Val or Met
209 <220> FEATURE:
210 <221> NAME/KEY: SITE
211 <222> LOCATION: (50)
212 <223> OTHER INFORMATION: Xaa=His, Asn or Arg
214 <220> FEATURE:
215 <221> NAME/KEY: SITE
216 <222> LOCATION: (51)
217 <223> OTHER INFORMATION: Xaa=Phe, Leu, Asn, Ser, Ala, or Val
219 <220> FEATURE:
220 <221> NAME/KEY: SITE
221 <222> LOCATION: (52)
222 <223> OTHER INFORMATION: Xaa=Ile, Met, Asn, Ala, Val, Gly, or Leu
224 <220> FEATURE:
225 <221> NAME/KEY: SITE
226 <222> LOCATION: (53)
227 <223> OTHER INFORMATION: Xaa=Asn, Lys, Ala, Glu, Gly, or Phe
229 <220> FEATURE:
230 <221> NAME/KEY: SITE
231 <222> LOCATION: (54)
232 <223> OTHER INFORMATION: Xaa=Pro, Ser or Val
234 <220> FEATURE:
235 <221> NAME/KEY: SITE
236 <222> LOCATION: (55)
237 <223> OTHER INFORMATION: Xaa=Glu, Asp, Asn, Gly, Val, Pro, or Lys
239 <220> FEATURE:
240 <221> NAME/KEY: SITE
241 <222> LOCATION: (56)
242 <223> OTHER INFORMATION: Xaa=Thr, Ala, Val, Lys, Asp, Tyr, Ser, Gly, Ile,
243 or His
245 <220> FEATURE:
246 <221> NAME/KEY: SITE
247 <222> LOCATION: (57)
248 <223> OTHER INFORMATION: Xaa=Val, Ala or Ile
250 <220> FEATURE:

RAW SEQUENCE LISTING
 PARENT APPLICATION: US/09/331,375

DATE: 07/30/2001
 TIME: 10:53:45

Input Set : A:\sequencelisting.txt
 Output Set: N:\CRF3\07302001\I331375.raw

```

251 <221> NAME/KEY: SITE
252 <222> LOCATION: (58)
253 <223> OTHER INFORMATION: Xaa=Pro or Asp
255 <220> FEATURE:
256 <221> NAME/KEY: SITE
257 <222> LOCATION: (59)
258 <223> OTHER INFORMATION: Xaa=Lys, Leu or Glu
260 <220> FEATURE:
261 <221> NAME/KEY: SITE
262 <222> LOCATION: (60)
263 <223> OTHER INFORMATION: Xaa=Pro, Val or Ala
265 <220> FEATURE:
266 <221> NAME/KEY: SITE
267 <222> LOCATION: (63)
268 <223> OTHER INFORMATION: Xaa=Ala or Val
270 <220> FEATURE:
271 <221> NAME/KEY: SITE
272 <222> LOCATION: (65)
273 <223> OTHER INFORMATION: Xaa=Thr, Ala or Glu
275 <220> FEATURE:
276 <221> NAME/KEY: SITE
277 <222> LOCATION: (66)
278 <223> OTHER INFORMATION: Xaa=Gln, Lys, Arg, or Glu
280 <220> FEATURE:
281 <221> NAME/KEY: SITE
282 <222> LOCATION: (67)
283 <223> OTHER INFORMATION: Xaa=Leu, Met or Val
285 <220> FEATURE:
286 <221> NAME/KEY: SITE
287 <222> LOCATION: (68)
288 <223> OTHER INFORMATION: Xaa=Asn, Ser, Asp, or Gly
290 <220> FEATURE:
291 <221> NAME/KEY: SITE
292 <222> LOCATION: (69)
293 <223> OTHER INFORMATION: Xaa=Ala, Pro or Ser
295 <220> FEATURE:
296 <221> NAME/KEY: SITE
297 <222> LOCATION: (70)
298 <223> OTHER INFORMATION: Xaa=Ile, Thr, Val, or Leu
300 <220> FEATURE:
301 <221> NAME/KEY: SITE
302 <222> LOCATION: (71)
303 <223> OTHER INFORMATION: Xaa=Ser, Ala or Pro
305 <220> FEATURE:
306 <221> NAME/KEY: SITE
307 <222> LOCATION: (72)
308 <223> OTHER INFORMATION: Xaa=Val, Leu, Met, or Ile
310 <220> FEATURE:
311 <221> NAME/KEY: SITE

```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/331,375

DATE: 07/30/2001

TIME: 10:46

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF3\07302001\I331375.raw

L:401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:404 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:407 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:410 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:413 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:416 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:820 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:823 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:829 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:832 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:835 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:838 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:997 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1000 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1003 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1006 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1009 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1012 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1015 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:2566 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:25